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Gershman transport international



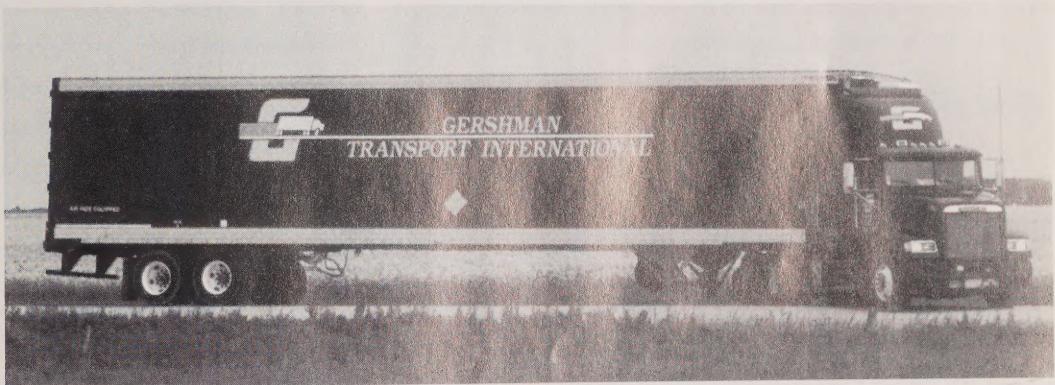
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# FleetSmart PROFILES

## GERSHMAN TRANSPORT INTERNATIONAL

*Achieving Cost Savings  
Through Leading-Edge Technology*



**Winnipeg-based  
Gershman Transport  
International's commit-  
ment to be at the  
leading edge of trucking  
industry innovations has  
enabled it to become  
a Canadian trendsetter  
in fleet fuel efficiency.**

### About the company

Gershman Transport International was founded in the 1930s as a wholesaler of agricultural goods. The company has since become a long-distance transportation company hauling general commodities throughout Canada and the continental United States.

The Gershman Transport fleet includes 150 tractors and 305 trailers, of which 140 are dry, 40 are heated and 125 are refrigerated units. Since shipments tend to cube-out rather than weight-out (i.e., the trailers are full before legal weight limits are reached), Gershman uses 53-foot high-cube air ride (110 inch) trailers to allow more cargo per shipment. To enhance aerodynamics and improve fuel economy, the trailers are equipped with a full faring package.

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Gershman Transport operates a "young" fleet to limit equipment breakdowns and improve reliability. "We want our trucks on the road, not sitting in a garage," states Lewis Gershman, company founder and President.

On average, tractors are less than two years old and trailers are less than three years old. In addition to keeping maintenance costs to a minimum, the company's strategy of regular equipment replacement allows it to remain at the leading edge of cost-saving technologies.

## Operations management

In 1994, Gershman Transport installed a two-way satellite communication system to link its central dispatch operation with the tractor fleet. The system allows dispatchers to communicate with one vehicle, a group of vehicles or the entire fleet. The system also allows the company to provide its customers with instant information about the status of their shipments and estimated arrival times.

"Since we pick up and deliver anywhere in Canada and the U.S., communication between dispatch and our drivers directly affects our bottom line," says Jonathan Gershman, Operations Manager and son of the founder.

Using the satellite system, each tractor's location can be pinpointed anywhere in North America at any time of the day or night, and pick up and delivery instructions can be passed to the driver via an on-board terminal. Prior to installation of the satellite system, drivers called dispatch every hour for instructions on the next load, often waiting at the nearest truck stop for new assignments. "This literally wasted hundreds of hours a week, not counting the cost in long-distance calls," says Jonathan Gershman.

than identical tractors powered by a competitive engine.

## Electronic engine technology

**Gershman Transport** was one of the first trucking companies in Canada to replace regular 14-litre engines with light-block, 10-litre Caterpillar 3176B electronic engines. These new engines allow larger payloads to be hauled with lower fuel consumption and are available with ratings from 275 to 365 horsepower.

**Gershman Transport** decided to use the new engines after an internal test program revealed that they provided 0.5 to 0.6 miles per gallon better fuel economy

The electronic control module (ECM) included with these engines records information on diagnostics, distance travelled and fuel consumption, and allows the company to customize certain engine features to suit its operations. The ECM also sends a reminder when maintenance is due, which helps the company avoid breakdowns and keeps the trucks on the road.

For an additional \$1,600 per engine, **Gershman Transport** has opted to install an information system



**add-on to the ECM that transfers data on up to 92 engine functions to an office computer. This makes it possible to store lifetime as well as trip data, including the distances driven in specific states or provinces, average fuel consumption, average speed and average load factor. The system can sort data by driver, vehicle, route, state or province, and generate a wide range of reports on vehicle and engine speed, maintenance, idling time, etc. Gershman Transport uses these reports to monitor driver performance and to check progressive shifting patterns and the use of cruise control.**

**In another cost-saving measure, the company is testing the use of synthetic engine oil. Although it is up to four times more expensive than regular oil, synthetic oil is actually less costly to use since fewer oil changes are required (synthetic oil should be changed about every 70 000 kilometres, compared to every 25 000 kilometres for regular oil). As well, engines start easily with synthetic oil, even in extremely cold weather. "It costs us about \$400 to tow a truck to start it," notes Lewis Gershman. "The synthetic oil pays for itself if it prevents even one cold-weather non-start in a year."**

Gershman Transport has integrated the satellite communication system with its operations management software to form a fully integrated management information system. This allows drivers to update their own bills of lading, determine the quickest route to a destination, and extract customer information from the head office database.

Although the satellite system has been a great success, its introduction was not problem free. "Our drivers did not take to it right away," acknowledges Jonathan Gershman. "They missed the human touch and kept calling in anyway." Similarly, dispatchers at first had some difficulty keeping track of trucks without placing them on the manual dispatch board (the manual board is still used as a visual aid). Within a year, however, everyone was completely comfortable with the new system. Based on the success of this initiative, the company is currently reviewing satellite tracking of its trailers.

## Fuel economy measures

With fuel costs accounting for about 23 per cent of Gershman Transport's total operating expenses, improved fuel efficiency is one of the company's ongoing objectives. Lewis Gershman says the focus is on reducing engine idling and vehicle speeds. Toward this end, the company has programmed its electronic engines to shut down automatically after five minutes of idling in the summer months. As a result, the average vehicle idles about 16 per cent of engine operating time in the summer months, compared to an estimated 54 per cent during the winter, when there is no idling control. To address winter idling, the company is evaluating the fuel savings from installing add-on cab

heaters that keep the trucks warm while the drivers sleep. The three-year evaluation period involves five trucks that have been fitted with the heaters, which cost about \$3,000 each.

In regard to vehicle speed, Gershman Transport programs its engines to operate at a maximum of 94 kilometres per hour on the pedal and 99 kilometres per hour on cruise control (the lower pedal speed encourages drivers to use cruise control, where fuel efficiency is maximized). As well, the high torque engines improve fuel economy because fewer shifts are required and the engines operate closer to their optimum efficiency.

Gershman Transport also offers its drivers a monetary incentive to drive efficiently. In winter, a driver running up to 17 700 kilometres in a month gets a \$25 bonus for achieving the company's minimum target of 36 L/100 km (7.75 miles per gallon), a \$50 bonus for achieving 34 L/100 km (8.25 miles per gallon), and a \$100 bonus for achieving 32 L/100 km (8.75 miles per gallon). During the summer months, the fuel efficiency targets required to receive the same bonuses are 33, 31 and 29 L/100 km (8.5, 9.0 and 9.5 miles per gallon), respectively. Drivers running 19 300 kilometres or more per month receive double the bonus for achieving the same fuel efficiency targets. Every month, about 25 per cent of the company drivers receive bonuses.

As a result of these measures, Gershman Transport believes that it is one of the most fuel-efficient trucking firms in Canada. In 1995, the average fuel consumption for the entire fleet was 34 L/100 km (8.4 miles per gallon) in summer and 38 L/100km (7.4 miles per gallon) in winter.



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